

# CLAIMS

What is claimed is:

1. A method for providing programming in a television delivery system, comprising:  
packaging the programming at a television delivery center, wherein the packaging includes at least one program;  
generating menu information related to the programming packaging;  
providing the menu information to terminals using the television delivery system;  
storing the menu information in the terminals;  
displaying the menu information as programming menus, wherein a programming menu is displayed on a first portion of a display coupled to a terminal and wherein the programming menu is displayed using a television channel;  
choosing a program from the displayed programming menu;  
receiving a program selection based on the program chosen from the displayed programming menu;  
switching the terminal from the television channel carrying the programming menu to a television channel carrying the chosen program, wherein the switching step is completed in response to a single control function; and  
displaying the chosen program on the display.
2. The method of claim 1, further comprising transmitting menu templates to the terminals, wherein the menu information is menu data and wherein the terminals create the programming menus based on the menu data and the menu templates.
3. The method of claim 1, wherein the menu information is provided to the terminals as the programming menus.
4. The method of claim 1, wherein the television delivery system includes a cable television headend.
5. The method of claim 1, wherein the television delivery system includes a backyard satellite receiver.
6. The method of claim 1, wherein the television delivery system includes an ~~operations center~~.

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1 7. The method of claim 6, wherein the operations center transmits the menu  
2 information and the programming to the cable television headend, and wherein the cable  
3 television headend inserts local programming into the packaging and local menu  
4 information into the menu information.

5 8. The method of claim 1, wherein the menu information includes date, time of day,  
6 channel and descriptive information for at least one program.

7 9. The method of claim 8, wherein the descriptive information includes a program  
8 title, a program rating and a program run time.

9 10. The method of claim 1, wherein the choosing step comprises:  
10 operating a control to highlight a program on the programming menu; and  
11 operating the control to designate the highlighted program as the chosen program.

12 11. The method of claim 10, wherein a portion of the programming menu extends  
13 beyond a screen size of the display, the choosing step further comprising operating the  
14 control to scroll to the portion of the programming menu that exceeds the screen size.

15 12. The method of claim 11, wherein the control is a remote control, the remote  
16 control including cursor buttons to navigate the programming menu, scroll the  
17 programming menu and highlight the programs, and a go button to designate the chosen  
18 program, and wherein an operation of the go button completes the single control function.

19 13. The method of claim 12, wherein the remote control is one of an infra red control  
20 and a radio frequency control.

21 14. The method of claim 1, further comprising updating the programming menus as  
22 programming packaging changes.

23 15. The method of claim 1, wherein the programming menu includes a video window,  
24 the video window used to display a video.

25 16. The method of claim 15, wherein the video includes advertisements targeted to  
26 the terminal.

27 17. The method of claim 16, wherein the advertisements are targeted based on viewer  
28 profile information.

1 18. The method of claim 17, wherein the viewer profile information includes one of  
2 programs watched information and viewer demographic information.

3 19. The method of claim 15, wherein the advertisements are displayed prior to display  
4 of the chosen program.

5 20. The method of claim 1, wherein the displayed program includes an overlay menu,  
6 the overlay menu further including a connection to alternate programming.

7 21. The method of claim 20, wherein the alternate programming includes access to  
8 an Internet service provider.

9 22. The method of claim 21, wherein a viewer accesses the Internet service provider  
10 by selecting the Internet service provider from the overlay menu and operating a go  
11 button on a control to connect to the Internet service provider.

12 23. The method of claim 1, wherein the menu data is provided over a cable television  
13 cable.

14 24. The method of claim 1, wherein the providing step further comprises:  
15 sending the menu information to an online address; and  
16 coupling the online address to the terminals, wherein when the online address is  
17 accessed, the menu information is displayed on the display as the programming menus.

18 25. The method of claim 24, wherein the chosen program is selected by selecting a  
19 program from the programming menus accessed through the online address.

20 26. The method of claim 25, wherein when the chosen program is selected, the  
21 terminal switches from the online address to a channel carrying the selected program.

22 27. The method of claim 1, wherein the chosen program includes one of a single  
23 event, a multiple event and a subscription.

24 28. The method of claim 27, wherein the subscription includes a speciality channel  
25 subscription and a speciality program subscription.

26 29. The method of claim 28, wherein the speciality channel subscription includes  
27 monthly and annual subscriptions.

28 30. The method of claim 28, wherein the speciality channel subscription is a first-run  
29 ~~movie channel subscription.~~

1 31. The method of claim 28, wherein the speciality program subscription is a sporting  
2 event subscription.

3 32. The method of claim 31, wherein the sporting event subscription includes a full  
4 season subscription and a partial season subscription.

5 33. The method of claim 31, wherein the sporting event subscription includes a  
6 favorite team subscription.

7 34. A method for generating a television program menu for use by viewers in  
8 selecting programs based on program line-up information, comprising:

9 obtaining and storing the program line-up information for each program,  
10 the program line-up information including program name, program start time,  
11 program duration, program category and program price;

12 generating menu data based on the program line-up information;

13 creating a program control information signal using the generated menu  
14 data;

15 transmitting the programs to the viewers; and

16 transmitting the program control information signal simultaneously with  
17 the programs.

18 35. The method of claim 34, wherein the program control information signal also  
19 contains information for identifying channels for interactive services and data services  
20 available to viewers, the method further comprising:

21 collecting information on the interactive and the data services available;

22 inventorying the interactive and the data services to be made available to the  
23 viewer;

24 assigning the channels for the interactive and the data services;

25 determining a method of upstream transmissions for the interactive and the data  
26 services; and

27 creating menu data for the interactive and the data services for transmission to the  
28 ~~viewers~~

45. The method of claim 43, wherein the program control information signal is provided in a dedicated channel.

1 46. The method of claim 38, further comprising:

2 generating menu templates;

3 providing the menu templates to the terminals; and

4 storing the menu templates in a memory of the terminal.

5 47. The method of claim 46, wherein the terminal creates a menu from the menu data,  
6 the menu displayed according to the menu templates.

7 48. The method of claim 46, wherein the menu templates include an introductory  
8 menu template, a home menu template, major menu templates and submenu templates,  
9 and wherein the displayed menu includes an introductory menu, a home menu, major  
10 menus and submenus.

11 49. The method of claim 48, wherein the major menus are arranged according to  
12 program categories, and wherein the major menus display programs available for  
13 viewing.

14 50. The method of claim 49, wherein the display of programs available for viewing  
15 comprises a list of program titles.

16 51. The method of claim 49, wherein the display of programs available for viewing  
17 includes a program rating.

18 52. The method of claim 38, wherein the menu is displayed on a television display,  
19 wherein portions of the menu exceed a display size of the television display, wherein the  
20 portions of the menu that exceed the display size are accessed by scrolling with a remote  
21 control, and wherein the window displays a video.

22 53. The method of claim 52, wherein the selected program is selected by selecting a  
23 program title using a remote control.

24 54. The method of claim 53, wherein the remote control is one of an infrared control  
25 and a radio frequency control.

26 55. The method of claim 54, wherein the remote control comprises cursor buttons and  
27 a go button, and wherein the cursor buttons are operated to scroll the menu and to  
28 highlight the desired program title and the go button is operated to select the highlighted  
29 ~~program title~~

1 56. The method of claim 52, wherein the selected program is selected by selecting a  
2 program title using a control on the terminal.

3 57. The method of claim 48, wherein the submenus include program description  
4 menus, notification menus, escape menus, and return to program menus.

5 58. The method of claim 57, wherein the program description menus include a  
6 program description, a program preview video, and a cost to order and wherein the  
7 program preview video is displayed in the window.

8 59. The method of claim 58, wherein the program description menus further include  
9 an order button, a return to menu button and a return to broadcast television button,  
10 wherein a program is ordered by highlighting the order button using a cursor and  
11 selecting the order button using a go button.

12 60. The method of claim 59, wherein the cursor and the go button are included in a  
13 remote control operably coupled to the terminal.

14 61. The method of claim 57, wherein the escape menu includes a time to program  
15 start, a cancel button and a return to broadcast television button, wherein operation of the  
16 cancel button ends a selected program without charge, the cancel button displayed for a  
17 fixed time measured from a start of the selected program.

18 62. A system that provides programming selection from a menu, comprising:  
19 a television delivery system that packages programming, wherein the  
20 programming package includes at least one program, generates menu information related  
21 to the programming, and provides the programming package and the menu information  
22 to subscribers;

23 a terminal operably connected to the television delivery system, the terminal  
24 comprising:

25 a memory that stores the menu information;

26 a processor connected to the memory that processes the menu information  
27 to generate the menu, and

28 a control operably connected to the processor that provides program  
29 ~~selection instructions to the processor; and~~

1 a display operably connected to the terminal that displays the menu and the  
2 programming, wherein the terminal switches to a channel carrying a program selected  
3 from the menu in response to a program selection instruction, the program selection  
4 instruction being a single control function.

5 63. The system of claim 62, wherein the channel is a virtual channel created by the  
6 terminal.

7 64. The system of claim 62, wherein the television delivery system provides menu  
8 templates to the terminal, the memory storing the menu templates, the processor  
9 generating the menus based on the menu templates and the menu information.

10 65. The system of claim 62, wherein the television delivery system provides the menu  
11 information as programming menus.

12 66. The system of claim 62, wherein the television delivery system includes an  
13 operations center.

14 67. The system of claim 62, wherein the television delivery system includes a cable  
15 television headend.

16 68. The system of claim 67, wherein the operations center transmits the menu  
17 information and the programming to the cable television headend, and wherein the cable  
18 headend inserts local programming into the programming package and local menu  
19 information into the menu information.

20 69. The system of claim 62, wherein the menu information includes date, time of day,  
21 channel and descriptive information for the at least one program.

22 70. The system of claim 69, wherein the descriptive information includes a program  
23 title, a program rating, and a program start time.

24 71. The system of claim 62, wherein the program selection instructions include  
25 highlight a desired program and select the desired program.

26 72. The system of claim 62, wherein the control is a remote control, the remote  
27 control comprising:

28 cursor buttons operable to navigate the menu, to scroll the menu, and to highlight  
29 ~~programs shown on the menu, and~~



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1 a select button operable to select a desired program, wherein an operation of the  
2 select button completes the single control function.

3 73. The system of claim 72, wherein the remote control is one of an infrared control  
4 and a radio frequency control.

5 74. The system of claim 62, wherein the television delivery system updates the menu  
6 information based on programming package changes and provides the updated menu  
7 information to the terminal.

8 75. The system of claim 62, wherein the menu includes a video window, the video  
9 window used to display a video.

10 76. The system of claim 75, wherein the video is an advertisement.

11 77. The system of claim 76, wherein the advertisement is targeted to the terminal.

12 78. The system of claim 77, wherein the advertisement is targeted based on viewer  
13 profile information.

14 79. The system of claim 78, wherein the viewer profile information includes programs  
15 watched information.

16 80. The system of claim 78, wherein the viewer profile information includes viewer  
17 demographic information.

18 81. The system of claim 62, wherein when the selected program is displayed, the  
19 selected program includes an overlay menu, the overlay menu including a connection to  
20 alternate programming.

21 82. The system of claim 81, wherein the alternate programming includes an online  
22 address.

23 83. The system of claim 62, wherein the programming package and the menu  
24 information are provided over a cable television cable.

25 84. The system of claim 62, wherein the programming package and the menu  
26 information are provided over a fiber optic cable.

27 85. The system of claim 62, wherein the programming package and the menu  
28 information are provided over a satellite broadcast and are received by a backyard

29 ~~satellite receiver.~~

1 86. The system of claim 62, wherein the programming package includes digital  
2 programs.

3 87. An apparatus that provides for television program selection from a displayed  
4 menu, comprising:

5 a terminal that receives television programs and menu data related to the  
6 television programs;

7 a display coupled to the terminal that displays the menu data and the television  
8 programs; and

9 a control that scrolls through the menu data, cursors through the menu data, and  
10 selects a desired television program from the television programs, wherein when the  
11 desired television program is selected, the terminal switches to a channel carrying the  
12 selected television program and the display displays the selected television program.

13 88. The apparatus of claim 87, wherein the television programs include digital  
14 programs.

15 89. The apparatus of claim 87, further comprising a backyard satellite receiver,  
16 wherein the television programs are received by the backyard satellite receiver.

17 90. The apparatus of claim 89, wherein the menu data is received by the backyard  
18 satellite receiver.

19 91. The apparatus of claim 87, further comprising a wireless modem, wherein the  
20 menu data is received by the wireless modem.

21 92. The apparatus of claim 87, further comprising a cable modem, wherein the  
22 television programs and the menu data are received by the cable modem.

23 93. The apparatus of claim 87, further comprising a fiber optic connector, wherein the  
24 television programs and the menu data are received by the fiber optic connector.

25 94. The apparatus of claim 87, wherein the selected television program includes one  
26 of a single event, a multiple event and a subscription.

27 95. The apparatus of claim 94, wherein the subscription includes a speciality channel  
28 subscription and a speciality program subscription.

1 96. The apparatus of claim 95, wherein the speciality channel subscription includes  
2 monthly and annual subscriptions.

3 97. The apparatus of claim 95, wherein the speciality channel subscription is a first-  
4 run movie channel subscription.

5 98. The apparatus of claim 95, wherein the speciality program subscription is a  
6 sporting event subscription.

7 99. The apparatus of claim 98, wherein the sporting event subscription includes a full  
8 season subscription and a partial season subscription.

9 100. The apparatus of claim 98, wherein the sporting event subscription includes a  
10 favorite team subscription.

11 101. The apparatus of claim 87, further comprising:

12 a processor; and

13 a memory coupled to the processor wherein the menu data is stored in the memory  
14 and wherein the processor processes the menu data to generate a television program  
15 menu.

16 102. The apparatus of claim 101, wherein the television program menu includes a  
17 video window.

18 103. The apparatus of claim 102, wherein the video window displays a program.

19 104. The apparatus of claim 103, wherein the program includes one of a still video and  
20 a moving video.

21 105. The apparatus of claim 103, wherein the program is text.

22 106. The apparatus of claim 103, wherein the program is related to the desired  
23 television program.

24 107. The apparatus of claim 87, wherein the channel is a virtual channel.

25 108. An apparatus for selecting programs, comprising:

26 a receiver that receives programs and program control information related to the  
27 received programs;

28 a memory coupled to the receiver that stores the program control information;

a display coupled to the processor that displays the program menu and the programs; and

a control coupled to the processor, the control providing program selection signals, wherein the program selection signals select a program for viewing on the display, the program selected from the list of available programs shown on the program menu.

109. The apparatus of claim 108, wherein the selected program includes one of a single event, a multiple event and a subscription.

110. The apparatus of claim 109, wherein the subscription includes a speciality channel subscription and a speciality program subscription.

111. The apparatus of claim 110, wherein the speciality channel subscription includes monthly and annual subscriptions.

112. The apparatus of claim 110, wherein the speciality channel subscription is a first-run movie channel subscription.

113. The apparatus of claim 110, wherein the speciality program subscription is a sporting event subscription.

114. The apparatus of claim 113, wherein the sporting event subscription includes a full season subscription and a partial season subscription.

115. The apparatus of claim 113, wherein the sporting event subscription includes a favorite team subscription.

116. The apparatus of claim 110, wherein the speciality channel subscription is a mini-pay subscription.

117. The apparatus of claim 109, wherein the subscription includes on line services.

118. The apparatus of claim 109, wherein the subscription includes data services.

119. An apparatus for selecting programs, comprising:

1 a receiver that receives the programs and program information related to the  
2 received programs;

3 a display that displays a program menu based on the program information; and  
4 a control, operable to select a program for viewing, the program selected based  
5 on the displayed program information, wherein a program available for selection includes  
6 a subscription to a speciality channel, and wherein operation of the control starts the  
7 subscription to the speciality channel.

8 120. The apparatus of claim 119, further comprising:

9 a memory coupled to the receiver, the memory storing the program information;  
10 and

11 a processor coupled to the receiver and the memory, the processor processing the  
12 program information to generate the program menu, the program menu stored in the  
13 memory, wherein the program menu provides a list of available programs for selection.

14 121. The apparatus of claim 119, wherein the speciality channel includes a mini pay.

15 122. The apparatus of claim 119, wherein the speciality channel is a first-run movie  
16 channel.

17 123. The apparatus of claim 119, wherein the speciality channel includes an on line  
18 service, the on line service accessed through an Internet service provider.

19 124. The apparatus of claim 119, wherein the program available for selection further  
20 includes a speciality program.

21 125. The apparatus of claim 124, wherein the speciality program includes one of a  
22 single event and a multiple event.

23 126. The apparatus of claim 125, wherein the speciality program includes a sporting  
24 event.

25 127. A method for selecting programs, comprising:

26 receiving programs and program information related to the received programs;

27 displaying a program menu based on the program information; and

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1 ordering a subscription to a program using a remote control, the program listed  
2 in the program menu, wherein the subscription includes a subscription to a speciality  
3 channel.

4 128. The method of claim 127, wherein the subscription includes daily, monthly and  
5 annual subscriptions.

6 129. The method of claim 128, wherein the speciality channel includes a first-run  
7 ~~movie channel~~

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